

# Uranium Drinking Water Standard and its Impact on States

May 19,2004

## NMA Challenge to Uranium MCL

- NMA felt EPA had inadequately evaluated the costs and benefits of the Uranium MCL
- SDWA requires EPA to analyze the quantifiable and nonquantifiable health risk reduction benefits associated with any MCL that is being considered and each alternative level that is being considered

## NMA's Argument

- NMA specifically raised the issue that some states are required by law to adopt MCLs as a groundwater protection and cleanup standards
- Other states, though not required by law, frequently chose to adopt MCLs as groundwater protection and cleanup standards

## Recent Developments

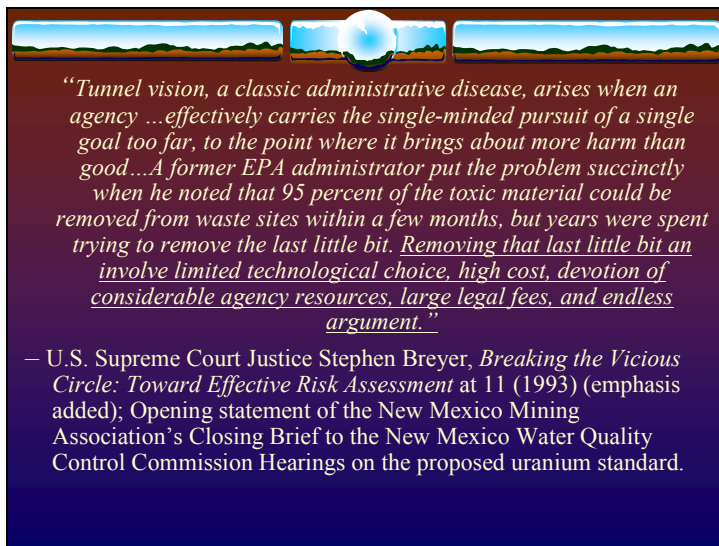
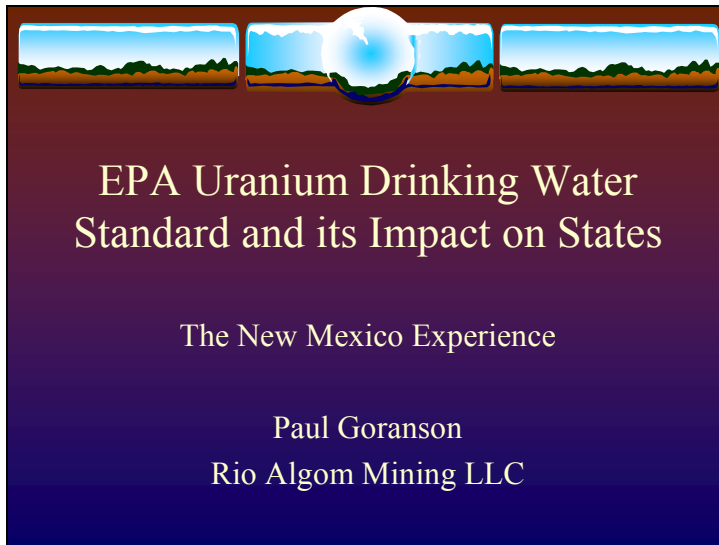
- Some states are moving to adopt the Uranium MCL (30 micrograms/liter) as a groundwater standard
  - New Mexico considering even lower standard of 7 ppb
  - Wyoming conducts meetings on 30 micrograms/liter
  - Utah proposes 30 micrograms/liter


## Other Issues

- NMA specifically raised the issue of creation of new wastes from treating drinking water to meet standard
- NMA asserted that EPA failed to adequately account for costs of treatment of new wastes
- NMA also argued that EPA failed to consider risks to workers handling these newly created wastes or to the public from disposal of those wastes

## New Wastes will be Created


- States determining how to proceed with treatment to meet MCL
- Treatment costs may lead to Congressional action
- Treatment facilities may have to pursue NRC licenses or exemption





## Uranium Groundwater Standards in New Mexico

- ❖ The current standards for uranium in groundwater is as follows:
  - ❖ Existing concentrations at the site prior to initiating the permitted activity or conditions at the enactment of the WQA.
  - ❖ The numeric standard found in 20.6.2.3103 NMAC, currently 5 mg/L.
- ❖ The GWQB is proposing to reduce the numeric standard to 7 µg/L.



## Uranium Groundwater Standards in New Mexico

- ❖ Complicating the application of the proposed standard is the method GWQB enforces compliance.
  - ❖ All waters within the State of NM with TDS concentrations < 10,000 mg/L are drinking water.
  - ❖ Compliance with the standards in 20.6.2.3103 is required in all areas of drinking water.
  - ❖ Access and reasonable use is not a significant factor in this enforcement, (e.g. the waters under a tailings impoundment with institutional controls is considered potential drinking water)



## Basis of the Proposed U Standard

- ❖ In 2001, GWQB commissioned a toxicology assessment for uranium in NM groundwaters.
- ❖ The promulgation of the Federal MCL (30 µg/L) was pending.
- ❖ The toxicology report recommended a reduced standard of 7 µg/L based on limited animal studies only.
- ❖ A proposed rule reducing the U standard from 5 mg/L to 7 µg/L was introduced by the GWQB in 2001.
- ❖ Minimal stakeholder involvement was made by GWQB



## NMMA Challenges to the GWQB

- ❖ Toxicology report was not peer reviewed.
- ❖ WQA requires other factors, in addition to health.
  - ❖ Cost Benefit
  - ❖ Technical infeasibility
- ❖ GWQB did not consider impacts on other industries, (e.g. Municipalities, other mining, oil & gas)
- ❖ There are no members of the public “at risk” to drinking water contaminated by facilities regulated by this regulation.
- ❖ The population at greatest risk, private water wells, are exempt from this standard.



## Impacts of the U standard

- ❖ Low numeric standard creates issues with detection.
- ❖ Any dischargers who exceed 7 µg/L U will become permittees, including communities who treat to meet the Federal MCL and discharge sewage.
- ❖ Creates many new permittees, including mines, O&G, and etc.
- ❖ Approved closure plans at uranium recovery facilities will re-assessed using the new standard.
  - ❖ Creates uncertainty to reach closure for these sites.
  - ❖ Places creates significant burden on permittees to meet discharge limits under NPDES and NRC release limits and not exceed the numeric standard.



## WQCC Hearings

- ❖ Hearings before the WQCC started in Sept. 2003
- ❖ NMED (GWQB) and their expert witnesses provided testimony in support of the rulemaking
- ❖ ENDAUM, anti-uranium mining group, testified in support of the NMED rule.
- ❖ NMMA, LANL, County of Santa Fe, and other industry witnesses testified against the rulemaking.



## WQCC Hearings

- ❖ GWQB staff acknowledged that cost-benefit and technical infeasibility consideration was minimal.
- ❖ GWQB staff acknowledged that there were no drinking water sources that were impacted by permitted sites.
- ❖ NMMA requested that all parties go back and work out a reasonable approach for the new standard.



## WQCC Hearing Outcomes

- ❖ Closing briefs were filed in May, 2004
- ❖ Decision pending Commission vote.
- ❖ Timing is uncertain.
- ❖ Based on the role of the WQCC, the numeric standard can be changed on their decision.
- ❖ Through the hearing process, the Federal MCL became the standard of discussion.